

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	BRS	L1	3287	369/275.3	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 14:13	
2	BRS	L2	2323	369/275.4	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 14:13	
3	BRS	L3	983	369/94	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 14:13	

	Error Definition	Err rors
1		
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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
4	BRS	L4	47575	G11B007/24	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 14:13	

	Error Definition	Err ors
4		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	BRS	L1	2	10/085682	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:37	
2	BRS	L2	18325 8	(dielectric near5 layer)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:37	
3	BRS	L3	12926 9	(recording near5 layer)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:38	

	Error Definition	Err ors
1		
2		
3		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
4	BRS	L4	61016	(phase near5 layer)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:38	
5	BRS	L5	6098	2 same 3	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:38	
6	BRS	L6	2684	2 same 4	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:38	

	Error Definition	Errors
4		
5		
6		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
7	BRS	L7	2454	(land near8 height)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:38	
8	BRS	L8	7912	(bump near8 height)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:40	
9	BRS	L9	33	7 same 8	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:38	

	Error Definition	Err ors
7		
8		
9		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
10	BRS	L10	12	(prerecorded near 8 height)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:41	
11	BRS	L11	4	4 same 8	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:42	
12	BRS	L12	107	4 and 8	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:42	

	Error Definition	Err rors
10		
11		
12		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
1	BRS	L1	2	10/085682	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:59	
2	BRS	L2	5237	(bump near8 height)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:59	
3	BRS	L3	23613	("80" "90") adj5 nm	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 10:59	

	Error- Definition	Err ors
1		
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	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
4	BRS	L4	8	2 same 3	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:00	
5	BRS	L5	80143	(phase near 8 layer)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:01	
6	BRS	L6	19562 7	(dielectric near 8 layer)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:01	

	Error Definition	Err ors
4		
5		
6		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
7	BRS	L7	23192 65	thickness	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:01	
8	BRS	L8	5210	5 near5 7	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:01	
9	BRS	L9	22696 5	7 near5 7	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:01	

	Error Definition	Err rors
7		
8		
9		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
10	BRS	L10	393	8 same 9	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:01	
11	BRS	L11	5	2 and 10	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:02	
12	BRS	L13	0	prepit and 10	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:02	

	Error Definition	Err ors
10		
11		
12		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
13	BRS	L12	11	bump and 10	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:03	
14	BRS	L15	13503 35	height	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:03	
15	BRS	L16	0	14 same 15	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:03	

	Error Definition	Err ors
13		
14		
15		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
16	BRS	L14	65	(prerecorded near5 pit)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:07	
17	BRS	L17	288	(embossed near5 pit)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:07	
18	BRS	L18	3	17 same 15	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:09	

	Error Definition	Errors
16		
17		
18		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
19	BRS	L19	28	17 and 6	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:09	
20	BRS	L20	63	17 and 5	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:09	
21	BRS	L21	15	19 and 20	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:14	

	Error Definition	Err ors
19		
20		
21		

	Type	L #	Hits	Search Text	DBs	Time Stamp	Comments
22	BRS	L22	5	17 and (land near8 height)	US- PGPUB ; USPAT ; USOCR ; EPO; JPO; DERWE NT; IBM_T DB	2006/03/2 8 11:15	

	Error Definition	Err ors
22		



DYNAMIC INFORMATION STORAGE OR RETRIEVAL

Classification 369/all - subclasses

[Link to MPEP Section 904 - How to Search](#)

[Link to MPEP Section 719.05 - Search Recordation](#)

[Link to USPTO Rules of the Road \(PDF DOC\)](#) when using Internet resources.

General Search Guidance

As general guidance, a complete search of the subject matter in this art area will include the following:

1. A classified search of the original classification class and subclass for the subject matter and the other highly relevant art areas in the US patent documents
2. A text search of the US patent documents; patents, PG PUB, and OCR databases
 - o Broad text search for the general inventive concept(s), not limited by classification
 - o Narrow text search for the specific claimed invention
 - o Boolean text search employing the relevant inventive terms
3. A search of the foreign patent documents, JPO, EPO, and World patents by a text search appropriate for abstract databases
4. A NPL search of the highly relevant databases
 - o Text search using care to distinguish between proper queries for full or abstract databases
 - o Other special databases as designated, if any

Additional searching may be appropriate at the professional discretion of the searcher. This search is normally expected to be completed prior to the indication of allowable subject matter; but is not per se required where the claimed and disclosed subject matter may not be appropriate for search in one or more resources. Further, for any additional appropriate databases for searching, the searcher may consult with the Electronic Information Center (EIC) in the Technology Center.

Field of Search

"When determining the field of search, three reference sources must be considered-domestic patent documents, foreign patent documents, and nonpatent literature (NPL). None of these sources can be eliminated from the search unless the examiner has and can justify a reasonable certainty that no references, more pertinent than those already identified, are likely to be found in the source(s) eliminated." (MPEP)

U. S. PATENT RESOURCES

EAST/WEST

[EAST](#) Coverage: 1971 - present, Full Text: 1971 - present

[WEST](#) Coverage: 1971 - present, Full Text: 1971 - present

Full text patent and inventor searching.

All patent documents in a classification are viewed by USPC for relevance to the patent application being searched. Classification search is most productive where the subject matter relates to visible structural details of an optical pickup head, laser source, photodetector, optical component, or storage medium details, or has specific circuitry/flowchart configuration that is easily visually represented, such as an amplifier in a particular location in a tracking servo loop or a gain increasing step having particular relationship to another step or subroutine. A text search should be performed to supplement the classification search, where the broad concepts/environment are searched by text rather than by subclasses and then combined with the text search of the inventive concepts. Text searching is most productive where the subject matter relates to non-visual characteristics, such as particular values, materials, and terminology. Inclusive and intelligent use of truncation, synonyms, and proximity is vital. Classification search should be combined with a text search where the relevant subclasses have large numbers of patents and where classification search is most productive. The text search should include only such terms as are necessary to bring the number of patents down to a reasonable number for viewing. Classification search should be combined with text search where the broad concepts/environment are found in particular subclasses and the specific inventive concepts are not easily visually represented. These inventive concepts for example may relate to particular circuitry, laser source, photodetector, and optical component non-visual characteristics, particular storage

medium materials, particular terminology.

BRS Search/USOCR Database

EAST Coverage: 1920 - 1970, Full Text: 1920 - 1970

WEST Coverage: 1920 - 1970, Full Text: 1920 - 1970

Full text of U.S. patent grants.

All patent documents in a classification are viewed by USPC for relevance to the patent application being searched.

PGPUBS

EAST Coverage: 2001 - present, Full Text: 2001 - present

WEST Coverage: 2001 - present, Full Text: 2001 - present

U.S. published applications.

All patent documents in a classification are viewed by USPC for relevance to the patent application being searched. Classification search is most productive where the subject matter relates to visible structural details of an optical pickup head, laser source, photodetector, optical component, or storage medium details, or has specific circuitry/flowchart configuration that is easily visually represented, such as an amplifier in a particular location in a tracking servo loop or a gain increasing step having particular relationship to another step or subroutine. A text search should be performed to supplement the classification search, where the broad concepts/environment are searched by text rather than by subclasses and then combined with the text search of the inventive concepts. Text searching is most productive where the subject matter relates to non-visual characteristics, such as particular values, materials, and terminology. Inclusive and intelligent use of truncation, synonyms, and proximity is vital. Classification search should be combined with a text search where the relevant subclasses have large numbers of patents and where classification search is most productive. The text search should include only such terms as are necessary to bring the number of patents down to a reasonable number for viewing. Classification search should be combined with text search where the broad concepts/environment are found in particular subclasses and the specific inventive concepts are not easily visually represented. These inventive concepts for example may relate to particular circuitry, laser source, photodetector, and optical component non-visual characteristics, particular storage medium materials, particular terminology.

FOREIGN PATENT RESOURCES

Search separately from the US Patent Search. These databases consist of abstract documents. Text searching abstracts requires the use of different search logic e.g. the use of broad Boolean and/or operators instead of narrow proximity operators.

Derwent World Patents Index, Classification and Text Search

EAST Coverage: 1963 - present, Full Text: - N/A

WEST Coverage: 1963 - present, Full Text: - N/A

English abstracts database of patent documents from more than 40 patent-issuing authorities.

Used for text and assignee/inventor searching. Queries may include classification parameters when combined with other terms to be searched in the technical content of the application.

EPO Abstracts, Text and Classification Search

EAST Coverage: 1978 - present, Full Text: - N/A

WEST Coverage: 1978 - present, Full Text: - N/A

English abstracts database of patents and published applications from EPO, WO/PCT, United Kingdom, France, Germany, and Switzerland. USPC searching is limited to documents added to the database from 1978 to September 30, 1995.

EPO patent documents in a USPC or an IPC classification are viewed for relevance to the patent application being searched. Used for text and assignee/inventor searching.

EPO esp@cenet

esp@cenet Coverage: 1920 - present, Full Text: 1920 - present

National patent information from all member states of the EPO as well as bibliographic data from patents worldwide.

Source for translations.

FPAS3

Coverage: - , Full Text: -

USPTO foreign document retrieval system.

JPO Abstracts, Text and Classification Search

EAST Coverage: 1976 - present, Full Text: - N/A

WEST Coverage: 1976 - present, Full Text: - N/A

English abstracts database of Japanese published unexamined applications. USPC searching is limited to documents added to the database from 1978 to September 30, 1995.

JPO patent documents in a USPC or an IPC classification are viewed for relevance to the patent application being searched. Used for text and assignee/inventor searching.

JPO Industrial Property Digital Library

NCIPI Coverage: 1976 - present, Full Text: 1976 - present

Japanese patent information.

This resource is used as a source for machine translations of Japanese patent documents from 1993 to present.

NON-PATENT LITERATURE RESOURCES

The resources listed are those that USPTO staff have found consistently yield the most relevant search results. Commercial databases available through a single vendor can generally be searched simultaneously, although it is preferable to search full text and bibliographic databases in separate groupings. In addition to the use of subscription databases and public Internet sites, it is recommended that books, manuals, standards and specifications be considered in the search for prior art. The links in the Resource Description section lead to:

- Database search help sheets for databases requiring training and passwords
- Databases themselves when access is governed by IP address
- Internet sites available to the public (USPTO "Rules of the Road (PDF Doc)")
- Book and journal records via the Scientific and Technical Information Center's (STIC) online catalog

EIC 2600 staff performs NPL searches and helps examiners who need NPL search assistance. For suggestions on additional NPL resources to search, contact EIC2600.

ACM Digital Library

ACM Coverage: Dates - vary, Full Text: Dates - vary

Citations and full text articles from ACM journals, newsletters, and conference proceedings.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

CA SEARCH: Chemical Abstracts

Dialog Coverage: 1967 - present, Full Text: - N/A

Questel Orbit Coverage: 1967 - present, Full Text: - N/A

STN Coverage: 1907 - present, Full Text: - N/A

Database of the worldwide literature of chemistry and its applications. Abstracts available via STN.

This resource provides relevant data if chemical compounds are relevant in disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

CMP Computer Fulltext

Dialog Coverage: 1988 - present, Full Text: 1988 - present

Full text information about the computer, communications, and electronic industries.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, high density data disks (HDD), and product data.

Ei Compendex

Dialog Coverage: 1970 - present, Full Text: - N/A
Questel Orbit Coverage: 1970 - present, Full Text: - N/A
STN Coverage: 1970 - present, Full Text: - N/A

Abstracted information from 4,500 journals plus conference proceedings in engineering and technology.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

Gale Group New Product Announcements/Plus (NPA/Plus)

Dialog Coverage: 1985 - present, Full Text: 1985 - present

Full text press releases from all industries covering announcements related to products, with a focus on new products and services.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, high density data disks (HDD), and product data.

IBM Technical Disclosure Bulletin

EAST/WEST Coverage: 1958 - 1998, Full Text: -

Defensive disclosure database.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

IEEE Xplore

IEEE Coverage: 1952 - present, Full Text: 1988 - present

Full text access to technical literature in electrical engineering, computer science, and electronics.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

Inside Conferences

Dialog Coverage: 1993 - present, Full Text: - N/A

Contains details of all papers given at every congress, symposium, conference, exposition, workshop, and meeting received at the British Library Document Supply Centre.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

Inspec (The Database for Physics, Electronics and Computing)

Dialog Coverage: 1898 - present, Full Text: - N/A
Dialog DataStar Coverage: 1969 - present, Full Text: - N/A
Questel Orbit Coverage: 1969 - present, Full Text: - N/A
STN Coverage: 1969 - present, Full Text: - N/A

Inspec (The Database for Physics, Electronics and Computing) corresponds to the three Science Abstracts print publications: Physics Abstracts, Electrical and Electronics Abstracts, and Computer and Control Abstracts.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

JICST-EPlus - Japanese Science & Technology

Dialog Coverage: 1985 - present, Full Text: - N/A
STN Coverage: 1985 - present, Full Text: - N/A

English citations and abstracts covering the literature published in Japan on all fields of science, technology, and medicine.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

SciSearch: A Cited Reference Science Database

Dialog Coverage: 1974 - 1989, Full Text: - N/A

STN Coverage: 1974 - present, Full Text: - N/A

Cited reference index.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

Wilson Applied Science & Technology Abstracts

Dialog Coverage: 1983 - present, Full Text: - N/A

Science and technology journal abstracts.

This resource provides relevant data on disk or disc technology, digital signal processing, recording, reproduction, optical medium devices, and high density data disks (HDD).

INTERNET SEARCH TOOLS

An Internet search should be considered when a search of the other resources listed in this template fail to locate relevant prior art. Consideration must be given to the guidance provided in the Rules of the Road ([PDF DOC](#)) for Internet searching for patent applications.

Google TM

Google Coverage: - N/A, Full Text: - N/A

Internet search engine.

This resource provides relevant information for the following: tutorials, inventor papers and/or web sites, assignee or company product data or specifications, manuals, standards such as MPEGs, RFC's (Request for Comments), and ISO/IEC, etc. In addition, provides access to resources that can define the meaning of acronyms, or terms of art.

For comments and suggestions, contact [Pamela Reynolds](#) at 571-272-3505.

Please obey USPTO "Rules of the Road ([PDF Doc](#))" when using Internet resources.

If you cannot access a file because of a missing or non-working plugin, please contact the Help Desk at 2-9000 for installation assistance.

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